

WATER QUALITY MEMORANDUM

Utah Coal Regulatory Program

September 24, 2014

TO: Internal File

THRU: Daron Haddock, Coal Program Manager

FROM: Steve Christensen, Environmental Scientist 

RE: 2014 1st Quarter Water Monitoring (WQ14-1), Price River Terminal, LLC,
Wellington Preparation Plant, C/007/0012, Task ID #4526

The Wellington Preparation Plant is currently in temporary cessation of coal mining or reclamation operations. However; trans-loading of oil is currently being conducted at the site by Price River Terminal, LLC (the Permittee). Water-monitoring requirements are in Sections 7.23 and 7.31.2 through 7.31.22, and Tables 7.24-2 and 7.24-5 of the MRP.

1. On what date does the MRP require a five-year re-sampling of baseline water data.

Baseline parameters are collected in the year preceding permit renewal. The next scheduled permit renewal for the Wellington Preparation Plant is November 30, 2014. Historically, baseline sampling has occurred during the 1st quarter of the permit renewal year. However; the Division and the Permittee have discussed that a data obtained during late 2nd quarter or 3rd quarter would be more representative of baseline conditions. As a result, the Permittee will collect baseline data either in 2nd or 3rd quarter of 2014.

2. Were data submitted for all of the MRP required sites?

Streams and Ponds

YES NO

The surface water monitoring plan requires sampling of nine surface water sites (SW-1, SW-2, SW-2A, SW-3, SW-4, SW-5, SW-6, SW-7 and SW-8). The required water quality parameters are provided in Table 7.24.5 with the exception of SW-2. Flow is the only data collected at monitoring site SW-2. Surface water monitoring sites are no longer monitored for BTEX-N. The reduction in monitoring at these sites was the result of inactivity at the site (Task ID #4253). Four of the sites are retention ponds (SW-5, SW-6, SW-7 and SW-8).

Water quality data was obtained from three sites: SW-1, SW-2 and SW-2A. The remaining monitoring locations reported no flow.

Wells

YES NO

The Permittee is required to analyze samples quarterly from 16 well sites. GW-12 is no longer required for monitoring (since 1st quarter 2012. Mid-term). GW-1, GW-3, GW-4, GW-6, GW-7, GW-8, GW-9, GW-9B, GW-10, GW-13, GW-14, GW-15A, GW-15B, GW-16, and GW-17 for the parameters in Table 7.24-2, and to measure depth only at GW-2.

Monitoring well GW-12 is no longer an actively monitored site. It was dropped during the most recent mid-term review (Task ID #4253). It was last sampled during the 4th quarter of 2012.

Data was submitted for all of the required monitoring well sites. Monitoring well GW-3, did not have enough water to collect a sample (i.e. they were reported dry).

UPDES YES NO

Six UPDES permitted outfalls at the Wellington Preparation Plant are monitored monthly: #UTG040010-003, 004, 005, 006, 007, and 008. None of the UPDES sites reported flow this quarter.

3. Were all required parameters reported for each site?

Streams and Ponds YES NO

Wells YES NO

UPDES YES NO

4. Were any irregularities found in the data?

Streams and Ponds YES NO

Surface water monitoring site SW-1 reported an elevated chloride (Cl) concentration outside of two standard deviations from the mean. The reported value of 119 parts per million (ppm) is 2.55 standard deviations from the mean of 56.57 ppm.

Surface water monitoring site SW-2 reported several parameters slightly outside of two standard deviations from the mean: dissolved calcium (D-Ca) 265.9 ppm, dissolved magnesium (D-Mg) 164.12 ppm, Cl 113 ppm, sulfate (SO4) 1,725 ppm, total hardness (T-Hardns) 1,340 ppm, total dissolved solids (TDS) 3,096 ppm and total anions (T-Anis) of 45.81 milliequivalents per liter (meq/l).

Wells YES NO

The following table summarizes the parameters that were outside of at least two standard deviations for this quarter:

Site	Date	Parameter	Reported Value	Standard deviations	Average
GW-1	3/25/2014	Cl	3 ppm	4.68	77.76 ppm
GW-1	3/25/2014	TDS	5,233 ppm	2.27	4,802 ppm
GW-13	3/25/2014	D-Na	3,182.7 ppm	2.68	3,810.79 ppm
GW-15A	3/26/2014	Cl	183 ppm	2.56	94.92 ppm
GW-15A	3/26/2014	T-Alk	744 ppm	2.21	542.07 ppm
GW-15A	3/26/2014	Cat-Ani	3.94	2.50	1.66
GW-15B	3/26/2014	T-Alk	531 ppm	2.03	483.91 ppm
GW-15B	3/26/2014	Cat-Ani	3.65	2.47	1.45
GW-16	3/26/2014	D-Mg	205.59 ppm	2.55	238.06 ppm
GW-16	3/26/2014	D-Na	367.89 ppm	3.02	422.34 ppm
GW-16	3/26/2014	Cl	98 ppm	2.06	72.21 ppm
GW-16	3/26/2014	SO4	1,628 ppm	3.53	2,134.06 ppm
GW-16	3/26/2014	T-Cats	49.01 meq/L	2.41	54.91 meq/L
GW-16	3/26/2014	T-Anis	46.96 meq/L	3.11	56.64 meq/L
GW-17	3/26/2014	Depth	14.68'	2.08	22.79'
GW-17	3/26/2014	D-Ca	215 ppm	9.99	55.33 ppm
GW-17	3/26/2014	D-Mg	165.44 ppm	8.31	53.48 ppm
GW-17	3/26/2014	D-K	10.93 ppm	4.53	7.32
GW-17	3/26/2014	SO4	1,088 ppm	4.92	311.68 ppm
GW-17	3/26/2014	T-Hardns	1,218 ppm	9.99	362.71 ppm
GW-17	3/26/2014	TDS	2,615 ppm	3.12	1,308.39 ppm
GW-17	12/13/2014	Depth	13.39'	2.41	22.79'
GW-17	12/13/2014	D-Ca	160.28 ppm	7.65	55.33 ppm
GW-17	12/13/2014	D-Mg	115.19 ppm	4.58	53.48 ppm
GW-17	12/13/2014	D-K	10.96 ppm	4.57	7.32 ppm
GW-17	12/13/2014	SO4	734 ppm	2.68	311.68 ppm
GW-17	12/13/2014	T-Hdns	875 ppm	8.10	362.71 ppm
GW-4	3/26/2014	D-Ca	321.38 ppm	3.00	367.63 ppm
Site	Date	Parameter	Reported Value	Standard deviations	Average

GW-4	3/26/2014	D-Mg	331.38 ppm	2.20	254.26 ppm
GW-4	3/26/2014	T-Anis	53.19 meq/L	2.32	66.94
GW-7	3/25/2014	Cat-Ani	4.26	2.20	1.83
GW-8	3/25/2014	Bcarb	789 ppm	6.72	968.05 ppm
GW-9B	3/25/2014	D-Mg	437.83 ppm	2.22	653.44 ppm
GW-9B	3/25/2014	D-Na	1,279.45 ppm	2.14	1,659.71 ppm
GW-9B	3/25/2014	T-Cats	107.38 meq/L	2.10	144.01 meqL
GW-9B	12/13/2014	D-Mg	442.82 ppm	2.17	653.44 ppm

UPDES

YES NO

Not Applicable. No discharges were reported from any of the UPDES monitoring locations.

5. Does the Mine Permittee need to submit more information to fulfill this quarter's monitoring requirements?

YES NO

6. Follow-up from last quarter, if necessary.

NA

7. Based on your review, what further actions, if any, do you recommend?

NA

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